Invasive Species Profile: Butterfly Bush (Buddleja davidii)

By Greg Sykes (greg@grsykes.com)

Native Range: China
U.S. Introduction: ~1900
Life Cycle: woody perennial
Means of Spreading: seeds
Commercially Available: yes
Control Method: hand-pull

Good Alternative Species: buttonbush

(Cephalanthus occidentalis), summersweet (Clethra

alniolia)

Comments:

Many folks are surprised to learn that butterfly bush is a non-native invasive species, especially since some wildlife advocacy groups champion this plant to help pollinating insects. While *Buddleja* is a nectar source, its prolific blooms lure butterflies away from pollinating less showy native flowers. Despite the adult butterflies being drawn to this shrub's flowers, the leaves nourish few if any organisms, particularly insect larvae—this shrub is considered a poor host plant.

From these bountiful *Buddleja* blossoms, viable seeds develop. These seeds spread both through natural action and by people illegally dumping yard



Figure 1. Butterfly bush blooms in many colors, including white, pink, and purple. The floral centers are usually orange. This image shows different stages of flower and fruit development.

debris containing the fruiting bodies into parkland. Cases of the latter have occurred at Royal Lake Park. Invasive Management Area (IMA) volunteers removed the tainted yard debris before the butterfly bush seeds germinated. Left unchecked in ideal conditions, this weed may quickly sprout into dense thickets. Absent natural grazers or parasites encourages rapid proliferation.



Figure 2. Round, spiky buttonbush flowers attract many native pollinators, including this eastern tiger swallowtail (*Papilio glaucus*). This native plant is also a larval host for dagger moths (*Acronicta oblinita*).

In some parts of the U.S., the butterfly bush is so invasive that its sales are banned. In the mid-Atlantic, butterfly bush poses a lower threat compared to other exotic species, such as autumn olive and Amur honeysuckle (both of which were promoted to benefit birds 40 years ago before discovering that their invasive properties outweighed any benefit). Conservationists have learned their lesson with those incorrectly endorsed exotic plants and are leery of butterfly bush's invasive properties. We can do better than Buddleja to entice moths and butterflies.

Buttonbush (*Cephalanthus* occidentalis), a Fairfax County native, draws several butterfly and

moth species, many different bees, and some hoverflies or syrphid flies (beneficial bee mimics). Summersweet (Clethra alniolia) is a Virginia native shrub attracting butterflies and bumble bees with fragrant floral structures resembling Buddleja. Both bushes prefer moist, sunny locations and are excellent rain garden additions. Since different plants bloom at different times, consider native wildflower meadows in your butterfly garden designs. With species such as Joe-Pye weed (Eutrochium sp.), blazing star (Liatris spicata), mountain mint (Pvcnanthemum muticum), butterfly weed (Asclepias tuberosa), and blue mistflower [Conoclinium (Eupatorium) coelestinum], butterflies will flock to the chromatic native food supply throughout the summer!

If you would like to help remove non-native invasive weeds around Royal Lake Park or become an IMA site leader, send a message expressing your interest to greg@grsykes.com.



Figure 3. Most wild type summersweet specimens produce white or cream-colored blossoms. Nurseries may also carry pink cultivars.

For more information on butterfly bush:

https://www.invasiveplantatlas.org/subject.html?sub=11608

https://www.invasive.org/weedcd/pdfs/wow/butterfly_bush.pdf

https://www.sciencedaily.com/releases/2008/05/080527102751.htm

http://kentuckynativeplantandwildlife.blogspot.com/2012/07/is-butterfly-bush-invasive-should-we.html

For tips on attracting butterflies:

https://www.fairfaxcounty.gov/parks/sites/parks/files/assets/documents/nature-history/greenspring/infosheets/butterfliesandmoths.pdf
https://www.dgif.virginia.gov/wildlife/habitat/

Eco-Article back issues:

- The Birds and the Butterflies: Part 1 (2009-06)
- The Birds and the Butterflies: Part 2 (2009-09)

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